

Hoefer SQ33 Sequencer

Includes Fan Sensor Kit



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Important Information – English

SQ33:

- If this equipment is used in a manner not specified by Hoefer, Inc. the protection provided by the equipment may be impaired.
- This instrument is designed for indoor laboratory use only.
- Only accessories and parts approved or supplied by Hoefer, Inc. may be used for operating, maintaining, and servicing this product.
- Only use a power supply that is CE marked or safety certified by a nationally recognized testing laboratory.
- The safety lid must be in place before connecting the power supply leads to a power supply.
- Turn all power supply controls off and disconnect the power leads before removing the safety lid.
- Circulate only water or 50/50 water/ethylene glycol through the heat exchanger if so equipped. Do not connect the heat exchanger to a water tap or any coolant source where the water pressure is unregulated.
- Never introduce antifreeze or any organic solvent into any part of the instrument. Organic solvents will cause irreparable damage to the unit!
- Do not operate with buffer temperatures above the maximum specified technical specifications. Overheating will cause irreparable damage to the unit!

Fan Sensor Kit:

- Warning! Because this instrument can develop sufficient voltage and current to produce a lethal shock, care must be exercised in its operation.
- This instrument is designed in accordance with the EN61010-1:2001 electrical safety standard. Nevertheless, it should be used only by properly trained operators. Read this entire manual before using the instrument and use only according to the instructions.
- The instrument must always be used with the earth lead of the power cord correctly grounded to earth at the mains outlet.
- Use only undamaged electrical wire and equipment specific for the voltages you will use. All equipment connected to high voltage should be in accordance with EN61010-1:2001.
- Keep the instrument as dry and clean as possible. Wipe regularly with a soft, damp cloth. Let the instrument dry completely before use.
- Do not operate the instrument in extreme humidity (above 80%). Avoid condensation by letting the unit equilibrate to ambient temperature when taking the instrument from a colder to a warmer environment.
- To permit sufficient cooling, ensure that the vents of the instrument are not covered.

Důležité informace – Czech

SQ33:

- Pokud toto zařízení používat způsobem, který není specifikován Hoefer, Inc ochrana poskytovaná zařízením může být snížena.
- Tento přístroj je určen pro vnitřní laboratorní použití.
- Pouze příslušenství a díly schválené nebo dodané Hoefer, Inc mohou být použity pro provoz, údržbu a servis tohoto produktu.
- Používejte pouze napájecí zdroj, který je označen značkou CE nebo bezpečnost certifikována celostátně uznávanou testovací laboratoří.
- Bezpečnostní víko musí být na místě před připojením napájení vede k napájení.
- Zapněte všechny napájení kontroluje a odpojte napájecí vodiče před vyjmutím bezpečnostní víko.
- Uváděny do oběhu pouze vodu nebo 50/50 vody/ethylen glykolu přes výměník tepla, pokud tak vybaven. Nepřipojujte výměníku tepla na vodovodní kohoutek nebo chladicí zdroj, kde je tlak vody neregulované.
- Nikdy zavést nemrznoucí nebo jakákoli organická rozpouštědla do jakékoli části přístroje. Organická rozpouštědla způsobí nenapravitelné škody na zařízení!
- Nepracujte s nárazníkových teplotách nad maximální uvedených technických specifikací. Přehřátí může způsobit nenapravitelné škody na zařízení!

Fan Sensor Kit:

- Varování! Vzhledem k tomu, tento nástroj se může vyvinout dostatečné napětí a proudů k výrobě smrtící šok, péče musí být vykonávána v provozu.
- Tento nástroj je navržen v souladu s EN61010-1: 2001 Elektrická bezpečnost standardní. Nicméně, mělo by být použito pouze řádně vyškolení operátorů. Přečtěte si celou tuto příručku před použitím přístroje a používat pouze v souladu s pokyny.
- Přístroj musí být vždy používán s země vedením napájecího kabelu řádně uzemněné na zem na zásuvky.
- Používejte pouze nepoškozený elektrické dráty a zařízení specifických pro napětí, které budete používat. Všechna zařízení připojeno k vysokým napětím by měla být v souladu s EN61010-1: 2001.
- Udržujte přístroj jako suchý a čistý, jak je to možné. Otřete pravidelně měkkým, vlhkým hadříkem. Nechte přístroj dokonale vyschnout před použitím.
- Nepoužívejte přístroj v extrémní vlhkosti (nad 80%). Zabránit kondenzaci par nechat přístroj vyteperovat na pokojovou teplotu při vyjmutí přístroje z chladnějšího do teplejšího prostředí.
- Chcete-li povolit dostatečné chlazení, zajistit, aby otvory pro přístroje se nevztahuje.

Vigtig information – Danish

SQ33:

- Hvis dette udstyr bruges på en måde, der ikke er specificeret af Hoefer, Inc. den beskyttelse, som udstyret kan være værdiforringet.
- Dette instrument er beregnet til indendørs laboratorium brug.
- Kun tilbehør og dele godkendt eller leveret af Hoefer, Inc. kan anvendes til drift, vedligeholdelse og service af dette produkt.
- Brug kun en strømforsyning, der er CE-mærket eller sikkerheds certificeret med et statsanerkendt prøvningslaboratorium.
- Sikkerheden Låget skal være på plads, før du slutter strømforsyningen fører til en strømforsyning.
- Drej alle strømforsyningen kontrollerer og frakobl strømforsyningen, før du fjerner sikkerheds låg.
- Cirkulere kun vand eller 50/50 vand/ethylen glycol gennem varmeveksleren hvis monteret. Tilslut ikke varmeveksleren til en vandhane eller en kølevæske kilde, hvor vandtrykket er ureguleret.
- Aldrig indføre frostvæske eller et organisk opløsningsmiddel til enhver del af instrumentet. Organiske opløsningsmidler vil forårsage uoprettelige skader på enheden!
- Betjen ikke med buffer temperaturer over de maksimale angivne tekniske specifikationer. Overophedning vil forårsage uoprettelige skader på enheden!

Fan Sensor Kit:

- Advarsel! Fordi dette instrument kan udvikle tilstrækkelig spænding og strøm til frembringelse af en dødelig chok, skal der udvises forsigtighed ved driften.
- Dette instrument er designet i overensstemmelse med EN61010-1: 2001 elektrisk sikkerhed standard. Ikke desto mindre bør det kun bruges af korrekt uddannet operatører. Læs hele denne manual inden du bruger instrumentet, og brug kun i henhold til instruktionerne.
- Instrumentet skal altid bruges sammen med jordledningen af netledningen korrekt jordet til jorden ved stikkontakten.
- Brug kun ubeskadigede elektriske ledninger og udstyr specifikt for de spændinger, du vil bruge. Alt udstyr, der tilsluttes høj spænding bør være i overensstemmelse med EN61010-1: 2001.
- Hold instrumentet så tør og ren som muligt. Tør regelmæssigt med en blød, fugtig klud. Lad instrumentet tørre helt inden brug.
- Brug ikke instrumentet i ekstrem luftfugtighed (over 80%). Undgå kondens ved at lade enheden ækvilibrere til stuetemperatur, når du tager instrumentet fra et koldere til et varmere miljø.
- At tillade tilstrækkelig køling, sørg for, at ventilationsåbningerne i instrumentet ikke er dækket.

Belangrijke informatie – Dutch

SQ33:

- Als deze apparatuur wordt gebruikt op een manier niet bepaald door Hoefer, Inc de bescherming die door de apparatuur worden aangetast.
- Dit instrument is ontworpen voor gebruik binnenshuis laboratorium gebruik.
- Alleen accessoires en onderdelen zijn goedgekeurd of geleverd door Hoefer, Inc kan worden gebruikt voor exploitatie, het onderhoud en reparatie van dit product.
- Gebruik alleen een voeding die CE-markering of de veiligheid gecertificeerd is door een nationaal erkende testlaboratorium.
- De veiligheid deksel moet in plaats voordat u de voeding leidt tot een voeding.
- Schakel alle stroomtoevoer regelt af en haal de stekker leidt voordat u de veiligheid deksel.
- Alleen circuleren water of 50/50 water/ethyleenglycol door de warmtewisselaar indien aanwezig. Maak de warmtewisselaar niet aan op een waterkraan of een koelvloeistof bron waar het water zwak is niet gereguleerd.
- Steek nooit antiviervies of organische oplosmiddelen op enig deel van het instrument. Organische oplosmiddelen veroorzaakt onherstelbare schade aan het apparaat!
- Werk niet met buffer temperaturen boven de maximale opgegeven technische specificaties. Oververhitting veroorzaakt onherstelbare schade aan het apparaat!

Fan Sensor Kit:

- Waarschuwing! Omdat dit instrument kan voldoende spanning ontwikkelen en stroom naar een dodelijke schok produceren, moet voorzichtigheid worden betracht bij de werking ervan.
- Dit instrument is ontworpen in overeenstemming met de EN61010-1: 2001 elektrische veiligheidsnorm. Toch moet alleen worden gebruikt door goed opgeleid exploitanten. Lees de volledige handleiding voordat u het instrument en gebruik alleen volgens de instructies.
- Het instrument moet altijd gebruikt worden met de aarddraad van het netsnoer goed geaard naar de aarde op het stopcontact.
- Gebruik alleen onbeschadigde elektrische draad en apparatuur die specifiek zijn voor de spanningen die u wilt gebruiken. Alle apparatuur die op hoge spanning moet in overeenstemming zijn met de EN61010-1: 2001.
- Houd het instrument zo droog en schoon mogelijk. Veeg regelmatig met een zachte, vochtige doek. Laat het instrument volledig drogen voor gebruik.
- Gebruik het instrument niet in extreem hoge luchtvochtigheid (boven 80%). Condensatie voorkomen door te laten de eenheid evenwicht tot omgevingstemperatuur bij het nemen van het instrument van een kouder naar een warmere omgeving.
- Om voldoende koeling mogelijk te maken, ervoor te zorgen dat de ventilatieopeningen van het instrument niet worden gedekt.

Tärkeitä tietoja – Finnish

SQ33:

- Jos laitetta käytetään tavalla ei määritelty Hoefer, Inc. antama suojaus saattaa heiketä.
- Tämä väline on suunniteltu sisätiloissa laboratorion käyttöön.
- Vain lisätarvikkeet ja osat hyväksytty tai toimittamia Hoefer, Inc. voi käyttää käytöstä, ylläpidosta ja huoltoa tuote.
- Käytä vain virtalähdettä, joka on CE-merkitty ja turvallisuutta sertifioitu kansallisesti tunnustettu testauslaboratorio.
- Turvallisuus Kannen on oltava paikoillaan ennen kuin kytkeä virtalähteen johtaa virtalähteeseen.
- Käännä kaikki virtalähteen ohjaa virta ja irrota virtajohto ennen kuin irrotat turvallisuutta kansi.
- Kierrätä vain vettä tai 50/50 vesi/etyleeniglykoli lämmönvaihtimen läpi, jos varusteena. Älä kytke lämmönvaihtimen vesihanaan tai jäähdytysnestettä lähde, josta vesi paine on sääntelemätöntä.
- Koskaan käyttöön pakkasnestettä tai mikä tahansa orgaaninen liuotin mihin tahansa osaan väline. Orgaaniset liuotimet aiheuttaa korjaamatonta vahinkoa laitetta!
- Älä käytä puskuria lämpötiloissa enimmäiskokoon tekniset tiedot. Ylikuumeneminen korjaamatonta vahinkoa laitetta!

Fan Sensor Kit:

- Varoitus! Koska tämä väline voi kehittyä riittävän jännitteen ja virran tuottamiseen tappavan iskun, on oltava varovaisia sen toiminnassa.
- Tämä väline on suunniteltu mukaisesti EN61010-1: 2001 sähköturvallisuus standardia. On kuitenkin syytä käyttää vain asianmukaisesti koulutetut operaattorit. Lue tämä käyttöohje ennen kuin käytät laitetta ja käytä vain ohjeiden mukaan.
- Laitte on aina käytettävä maajohtoa virtajohto kunnolla maadoitettu Earth pistorasiaan.
- Käytä vain vahingoittumattomia sähköjohtoja ja laitteet spesifisiä jännitteiden käytät. Kaikki laitteet on kytketty suurjännitte olisi noudatettava EN61010-1: 2001.
- Pidä laite kuivana ja puhtaana kuin mahdollista. Pyyhi säännöllisesti pehmeällä, kostealla liinalla. Anna laitteen kuivua täysin ennen käyttöä.
- Älä käytä laitetta hyvin kosteissa (yli 80%). Vältä kosteuden tiivistymistä antamalla yksikön tasaantua ympäristön lämpötilaan, kun otetaan instrumentti kylmempi lämpimämpään ympäristöön.
- Sallia riittävä jäähdytys, että tuuletusaukkojen välineen eivät kuulu.

Informations importantes – French

SQ33:

- Si cet équipement est utilisé d'une manière non spécifiée par Hoefer, Inc la protection fournie par l'équipement peut être altérée.
- Cet instrument est conçu pour une utilisation en laboratoire à l'intérieur uniquement.
- Seuls les accessoires et les pièces approuvées ou fournies par Hoefer, Inc peut être utilisé pour le fonctionnement, la maintenance et l'entretien de cet appareil.
- Utilisez uniquement un bloc d'alimentation qui est marqué CE ou la sécurité certifié par un laboratoire reconnu au niveau national.
- Le couvercle de sécurité doit être en place avant de brancher les fils d'alimentation à une alimentation électrique.
- Mettez tous alimentation contrôle hors tension et débranchez les câbles d'alimentation avant de retirer le couvercle de sécurité.
- Faire circuler que de l'eau ou 50/50 eau/éthylène glycol dans l'échangeur de chaleur s'il en est équipé. Ne branchez pas l'échangeur de chaleur à un robinet d'eau ou toute autre source de liquide de refroidissement où la pression de l'eau n'est pas réglementé.
- Ne jamais introduire d'antigel ou tout autre solvant organique dans n'importe quelle partie de l'instrument. Solvants organiques provoquent des dommages irréparables à l'appareil!
- Ne faites pas fonctionner avec des températures au-dessus des tampons maximales spécifiées spécifications techniques. Une surchauffe peut causer des dommages irréparables à l'appareil!

Fan Sensor Kit:

- Attention! Parce que cet instrument peut se développer de tension et une intensité suffisantes pour produire un choc mortel, il faut être prudent dans son fonctionnement.
- Cet instrument est conçu conformément à la norme EN61010-1: 2001 norme de sécurité électrique. Néanmoins, il doit être utilisé uniquement par des opérateurs dûment formés. Lisez ce manuel avant d'utiliser l'instrument et d'utiliser uniquement selon les instructions.
- L'instrument doit toujours être utilisé avec le fil de terre du cordon d'alimentation correctement mis à la terre à la prise de courant.
- Utilisez uniquement des fils en bon état électrique et des équipements spécifiques pour les tensions que vous allez utiliser. Tous les équipements connectés à haute tension doivent être conformes à la norme EN61010-1: 2001.
- Gardez l'appareil au sec et propre que possible. Essayez régulièrement avec un chiffon doux et humide. Laissez l'instrument sécher complètement avant utilisation.
- Ne pas faire fonctionner l'instrument dans une atmosphère

très humide (plus de 80%). Éviter la condensation en laissant l'unité s'équilibrer à la température ambiante lors de la prise de l'instrument à partir d'un froid à un environnement chaud.

- Afin de permettre un refroidissement suffisant, assurez-vous que les orifices de l'appareil ne sont pas couverts.

Wichtige information – German

SQ33:

- Wenn dieses Gerät in einer Weise, die nicht durch Hoefer, Inc. angegeben verwendet wird, der Schutz des Geräts beeinträchtigt sein.
- Dieses Instrument ist für den Innen-Einsatz im Labor konzipiert.
- Nur Zubehör und Teile zugelassen oder von Hoefer, Inc. versorgt kann für den Betrieb verwendet werden, Pflege und Wartung dieses Produkts.
- Verwenden Sie nur eine Stromversorgung, die CE-Kennzeichnung oder die Sicherheit zertifiziert ist durch ein staatlich anerkanntes Prüflabor.
- Die Sicherheit Deckel muss vorhanden sein, bevor Sie die Stromversorgung führt zu einer Stromversorgung.
- Schalten Sie alle Stromversorgung steuert aus und ziehen Sie den Netzstecker führt, bevor Sie den Sicherheitsdeckel.
- Zirkulieren nur Wasser oder 50/50 Wasser/Ethylenglykol durch den Wärmetauscher falls vorhanden. Schließen Sie den Wärmetauscher an einen Wasserhahn oder einen Kühlmittel-Quelle, wo der Wasserdruck ist ungeregelt.
- Nie einzuführen Frostschutzmittel oder keine organischen Lösungsmittel in einen Teil des Instruments. Organische Lösungsmittel verursacht irreparable Schäden am Gerät!
- Nicht mit Puffer Temperaturen oberhalb der maximal angegebenen technischen Spezifikationen arbeiten. Überhitzung kann zu irreparablen Schäden am Gerät!

Fan Sensor Kit:

- Warnung! Da dieses Instrument genügend Spannung entwickeln kann und Strom, um einen tödlichen Stromschlag zu erzeugen, muss darauf in seinem Betrieb ausgeübt werden.
- 2001 elektrische Sicherheit Standard: Dieses Gerät ist in Übereinstimmung mit der EN61010-1 ausgelegt. Dennoch sollte sie nur von entsprechend geschultem Operatoren verwendet werden. Lesen Sie das gesamte Handbuch, bevor Sie das Gerät und verwenden Sie nur nach den Anweisungen.
- Das Gerät muss immer mit dem Schutzleiter des Stromkabels korrekt mit der Erde an der Steckdose geerdet werden.
- Verwenden Sie nur unbeschädigte elektrische Drähte und spezielle Ausrüstungen für die Spannungen, die Sie verwenden. 2001: Alle Geräte, die an hohe Spannung sollte in Übereinstimmung mit EN61010-1 sein.
- Halten Sie das Gerät trocken und sauber wie möglich. Wischen Sie regelmäßig mit einem weichen, feuchten Tuch.

Lassen Sie das Gerät vollständig trocknen, bevor Gebrauch.

- Betreiben Sie das Instrument nicht in extreme Luftfeuchtigkeit (über 80%). Kondensation vermeiden, indem das Gerät auf Raumtemperatur äquilibrieren, wenn man das Gerät von einer kalten in eine wärmere Umgebung.
- Um eine ausreichende Kühlung zu ermöglichen, stellen Sie sicher, dass die Lüftungsschlitze des Gerätes nicht verdeckt sind.

Informazioni importanti – Italian

SQ33:

- Se l'apparecchiatura viene utilizzata in un modo non specificato da Hoefer, Inc. la protezione fornita dallo strumento può essere compromessa.
- Questo strumento è stato progettato per l'uso in laboratorio interno.
- Solo accessori e ricambi approvati o forniti da Hoefer, Inc. può essere utilizzato per il funzionamento, la gestione e la manutenzione di questo prodotto.
- Utilizzare solo un alimentatore che la marcatura CE o di sicurezza certificato da un laboratorio di prova riconosciuto a livello nazionale.
- Il coperchio di sicurezza deve essere in posizione prima di collegare l'alimentazione porta ad un alimentatore.
- Accendere tutti alimentatore controlla e scollegare i cavi di alimentazione prima di rimuovere il coperchio di sicurezza.
- Circolare solo acqua o 50/50 di acqua/glicole etilenico attraverso lo scambiatore di calore se presente. Non collegare lo scambiatore di calore ad un rubinetto dell'acqua o di qualsiasi altra fonte del liquido di raffreddamento in cui la pressione dell'acqua è regolamentata.
- Non introdurre antigelo o qualsiasi solvente organico in qualsiasi parte dello strumento. Solventi organici può causare danni irreparabili alla centralina!
- Non utilizzare con temperature sopra i massimi tampone specifiche tecniche indicate. Il surriscaldamento può causare danni irreparabili alla centralina!

Fan Sensor Kit:

- Attenzione! Dal momento che questo strumento può sviluppare una tensione e corrente sufficiente a produrre uno shock, la cura deve essere esercitata nel suo funzionamento.
- Questo strumento è stato progettato secondo la EN61010-1: 2001 standard di sicurezza elettrica. Tuttavia, deve essere utilizzato solo da parte di personale addestrato. Leggere il presente manuale prima di utilizzare lo strumento e utilizzare solo secondo le istruzioni.
- Lo strumento deve essere sempre utilizzato con il cavo di terra del cavo di alimentazione di messa a terra a terra alla presa di corrente.
- Utilizzare solo cavo elettrico danneggiato e attrezzature specifiche per le tensioni si intende utilizzare. Tutte le apparecchiature collegate ad alta tensione deve essere in accordo con EN61010-1: 2001.

- Tenere lo strumento più asciutto e pulito possibile. Pulire regolarmente con un panno morbido e umido. Lasciare asciugare completamente lo strumento prima dell'uso.
- Non utilizzare lo strumento in alta umidità (superiore all'80%). Evitare la formazione di condensa lasciando che l'unità raggiunga la temperatura ambiente quando prende lo strumento da un freddo a un ambiente più caldo.
- Per consentire un sufficiente raffreddamento, assicurarsi che le prese d'aria dello strumento non sono coperti.

Viktig informasjon – Norwegian

SQ33:

- Hvis dette utstyret brukes på en måte som ikke er spesifisert av Hoefer, Inc. beskyttelsen av utstyret kan bli svekket.
- Dette instrumentet er beregnet for innendørs laboratorium bruk.
- Bare tilbehør og deler som er godkjent eller levert av Hoefer, Inc. kan brukes til drift, vedlikehold og vedlikehold av dette produktet.
- Bruk kun en strømforsyning som er CE-merket eller sikkerhet sertifisert av et nasjonalt anerkjent testlaboratorium.
- Sikkerheten lakk må være på plass før du kobler til strømforsyningen fører til en strømforsyning.
- Slå all strømtilførsel styrer av og koble strømledningene før du tar sikkerheten lokket.
- Sirkuler bare vann eller 50/50 vann/etylen glykol gjennom varmeveksleren hvis slik utstyrt. Ikke koble varmeveksler til en vannkran eller kjølevæske kilde hvor vanntrykket er uregulert.
- Aldri introdusere frostvæske eller ethvert organisk oppløsningsmiddel inn i noen del av instrumentet. Organiske løsemidler vil føre til uopprettelig skade på enheten!
- Opererer ikke med buffer temperaturer over den maksimale angitte tekniske spesifikasjoner. Overoppheting vil forårsake uopprettelig skade på enheten!

Fan Sensor Kit:

- Advarsel! Fordi dette instrumentet kan utvikle tilstrekkelig spenning og strøm for å produsere en dødelig støt, må det utvises forsiktighet i sin drift.
- Dette instrumentet er utformet i samsvar med EN61010-1: 2001 elisikkerhet standard. Likevel bør det bare brukes av riktig opplæring operatører. Les hele denne håndboken før du bruker instrumentet og bruk kun i henhold til instruksjonene.
- Instrumentet må alltid brukes sammen med jordledningen av strømledningen riktig jordet til jorden på stikkontakten.
- Bruk bare uskadde elektrisk ledning og utstyr bestemt for spenninger du vil bruke. Alt utstyr som er koblet til høy spenning bør være i samsvar med EN61010-1: 2001.
- Hold instrumentet så tørt og rent som mulig. Tørk regelmessig med en myk, fuktig klut. La instrumentet tørke helt før bruk.

- Ikke bruk instrumentet i ekstrem luftfuktighet (over 80%). Unngå kondens ved å la enheten tilpasse seg til omgivelsestemperaturen når du tar instrumentet fra en kaldere til varmere omgivelser.
- Å tillate tilstrekkelig kjøling, må du sørge for at ventilasjonssåpningene på instrumentet ikke er dekket.

Wazne informacje – Polish

SQ33:

- Jeśli urządzenie jest używane w sposób, który nie został określony Hoefer, Inc ochrona zapewniana przez urządzenie może być zaburzona.
- Instrument ten jest przeznaczony do użytku w pomieszczeniach laboratoryjnych tylko.
- Tylko części i akcesoria zatwierdzone lub dostarczone przez Hoefer, Inc mogą być używane do obsługi, konserwacji i serwisowania tego produktu.
- Należy używać wyłącznie zasilacza, który jest oznaczony znakiem CE lub bezpieczeństwa certyfikowane przez uznanym w kraju laboratorium.
- Pokrywa bezpieczeństwa musi być na miejscu przed podłączeniem zasilania prowadzi do zasilania.
- Włącz wszystkie Zasilacz kontroluje i odłączyć przewody zasilania przed zdjęciem pokrywy bezpieczeństwa.
- Krążyć wodą lub 50/50 glikolu etylenowego/wody przez wymiennik ciepła, jeśli tak wyposażone. Nie należy podłączać do wymiennika ciepła do zaworu wody lub każdego źródła chłodzącego, gdzie ciśnienie wody jest nieregulowany.
- Nigdy nie wprowadzać zamarzaniu ani organicznych rozpuszczalników w jakiegokolwiek części urządzenia. Rozpuszczalniki organiczne, spowoduje nieodwracalne uszkodzenie urządzenia!
- Nie działają w temperaturach powyżej maksimum buforowych określonych specyfikacjach technicznych. Przegrzanie może spowodować nieodwracalne uszkodzenie urządzenia!

Fan Sensor Kit:

- Ostrzeżenie! Ponieważ instrument ten może rozwinąć wystarczające napięcie i prąd do wytworzenia śmiertelną prądem, należy zachować ostrożność w jej działania.
- Instrument ten został zaprojektowany zgodnie z EN61010-1: 2001 elektryczne standard bezpieczeństwa. Należy jednak być używane tylko przez odpowiednio przeszkolonych operatorów. Przeczytaj całą instrukcję przed użyciem instrumentu i używać tylko zgodnie z instrukcją.
- Urządzenie musi być zawsze używane z uziemiający przewodu zasilającego prawidłowo uziemione w gniazdku sieciowym.
- Używaj tylko nieuszkodzony elektrycznych przewodów i sprzętem dla napięć będzie używać. Wszystkie urządzenia podłączone do wysokiego napięcia powinny być zgodne z EN61010-1: 2001.

- Zachowaj instrument, suche i czyste jak to możliwe. Przecierać regularnie miękką, wilgotną szmatką. Niech instrumentem wyschnąć przed użyciem.
- Nie używaj instrumentu w dużej wilgotności (powyżej 80%). Uniknąć kondensacji, pozwalając urządzeniu wyrównania temperatury otoczenia podczas wykonywania instrumentu z chłodniejszego do cieplejszego.
- Aby umożliwić odpowiednie chłodzenie, upewnij się, że otwory w instrumencie nie są objęte.

Informação importante – Portuguese

SQ33:

- Se este equipamento for utilizado de uma forma não especificada pelo Hofer, Inc., a proteção fornecida pelo equipamento poderá ser prejudicada.
- Este instrumento foi projetado para uso em laboratório no interior.
- Somente acessórios e peças aprovadas ou fornecidos por Hofer, Inc. podem ser utilizados para a operação, manutenção e atendimento a este produto.
- Usar apenas uma fonte de alimentação que a marcação CE ou de segurança certificado por um laboratório reconhecido nacionalmente.
- A tampa de segurança devem estar no local antes de ligar o fornecimento de energia leva a uma fonte de alimentação.
- Vire toda a oferta de energia controla e desconecte os cabos de alimentação antes de remover a tampa de segurança.
- Circulam apenas água ou 50/50 de água/etileno glicol através do permutador de calor, se assim equipado. Não ligue o trocador de calor para uma torneira de água ou qualquer outra fonte de refrigerante, onde a pressão da água é regulamentada.
- Nunca introduzir anticongelante ou qualquer solvente orgânico em qualquer parte do instrumento. Solventes orgânicos podem provocar danos irreparáveis para a unidade!
- Não opere com temperaturas acima de buffer o máximo especificado especificações técnicas. Superaquecimento irá causar danos irreparáveis a unidade!

Kit Sensor fã:

- Atenção! Porque este instrumento pode desenvolver tensão e corrente suficiente para produzir um choque letal, o cuidado deve ser exercido em sua operação.
- Este instrumento foi projetado de acordo com a EN61010-1: 2001 padrão de segurança elétrica. No entanto, ele deve ser usado apenas por operadores devidamente treinados. Leia todo o manual antes de usar o instrumento e usar apenas de acordo com as instruções.
- O instrumento deve ser sempre usado com o fio terra do cabo de alimentação corretamente aterrado na tomada.
- Use apenas fios danificados elétrica e equipamentos espe-

cíficos para as tensões que você irá usar. Todos os equipamentos conectados à alta tensão deve estar de acordo com EN61010-1: 2001.

- Mantenha o instrumento o mais seco e limpo possível. Limpe com um pano macio e úmido. Deixe o instrumento secar completamente antes de usar.
- Não utilizar o aparelho de extrema umidade (acima de 80%). Evitar a condensação, deixando a unidade de atingir a temperatura ambiente ao tirar o instrumento a partir de um mais frio para um ambiente mais quente.
- Para permitir uma refrigeração suficiente, garantir que as aberturas do instrumento não são cobertos.

Información importante – Spanish

SQ33:

- Si este equipo se utiliza de una manera no especificada por Hofer, Inc., la protección proporcionada por el equipo puede verse afectada.
- Este instrumento está diseñado para uso en laboratorio en interiores.
- Sólo los accesorios y partes homologado o suministrado por Hofer, Inc. puede ser utilizado para el funcionamiento, mantenimiento y reparación de este producto.
- Utilice solamente una fuente de alimentación que lleva la marca CE o certificado de seguridad por un laboratorio de pruebas reconocido nacionalmente.
- La tapa de seguridad deben estar en su lugar antes de conectar la fuente de alimentación conduce a una fuente de alimentación.
- Gire todas las fuentes de energía controla y desconecte los cables de alimentación antes de retirar la tapa de seguridad.
- Circule sólo agua o 50/50 de agua/glicol de etileno a través del intercambiador de calor si lo tiene. No conectar el intercambiador de calor a un grifo de agua o de cualquier fuente de refrigerante donde la presión del agua es regulada.
- Nunca introducir anticongelante o cualquier disolvente orgánico en ninguna parte del instrumento. Los solventes orgánicos puede causar daños irreparables en el aparato!
- No trabajar con temperaturas por encima de los máximos de amortiguamiento especificados especificaciones técnicas. El recalentamiento puede causar daños irreparables en el aparato!

Fan Kit Sensor:

- ¡Advertencia! Debido a que este instrumento puede desarrollar suficiente voltaje y corriente para producir una descarga eléctrica mortal, se debe tener cuidado en su funcionamiento.
- Este instrumento está diseñado de acuerdo con la norma EN61010-1: 2001 norma de seguridad eléctrica. No obstante, debe ser utilizado sólo por operadores debidamente capacitados. Lea este manual en su totalidad antes de usar el instrumento y utilizar solamente de acuerdo con las instrucciones.

- El instrumento se debe utilizar siempre con la toma de tierra del cable de alimentación correctamente conectado a tierra en la caja de enchufe.
- Use sólo cables eléctricos intactos y equipo específico para las tensiones que va a utilizar. Todos los equipos conectados a alta tensión debe ser de acuerdo con la norma EN61010-1: 2001.
- Mantenga el instrumento lo más seca y limpia posible. Limpie periódicamente con un paño suave y húmedo. Deje que el aparato se seque completamente antes de su uso.
- No utilice el instrumento en condiciones de extrema humedad (superior al 80%). Evite la condensación permitiendo que la unidad alcance la temperatura ambiente en el momento de tomar el instrumento a una más fría que la temperatura normal.
- Para permitir la refrigeración adecuada, asegúrese de que los orificios de ventilación del equipo no están cubiertos.
- Instrumentet skall alltid användas med jordkabel nätsladden korrekt jordad till jorden vid vägguttaget.
- Använd endast oskadade elektrisk tråd och utrustning som är specifik för de spänningar du kommer att använda. All utrustning är ansluten till högspänning skall ske i enlighet med EN61010-1: 2001.
- Håll instrumentet så torr och ren som möjligt. Torka regelbundet med en mjuk, fuktig trasa. Låt instrumentet torka helt före användning.
- Använd inte instrumentet i hög luftfuktighet (över 80%). Undvik kondens genom att låta enheten jämvikt till rumstemperatur när du tar instrumentet från en kallare till en varmare omgivning.
- För att möjliggöra tillräcklig kylning, se till att ventilerna i instrumentet inte omfattas.

Viktig information – Swedish

SQ33:

- Om denna utrustning används på ett sätt som inte specificeras av Hoefel, Inc. skydd som utrustningen kan försämrats.
- Detta instrument är avsett för inomhusbruk laboratorium bruk.
- Endast tillbehör och reservdelar godkända eller levereras av Hoefel, Inc. kan användas för drift, underhåll och service av denna produkt.
- Använd endast en strömkälla som är CE-märkt eller säkerhet certifierad av ett nationellt erkänt testlaboratorium.
- Säkerheten Locket måste sitta på plats innan du ansluter strömförsörjningen leder till en strömkälla.
- Slå alla strömförsörjningen kontrollerar av och kopplar leder innan du tar bort säkerheten locket.
- Cirkulera endast vatten eller 50/50 vatten/etylenglykol genom värmväxlaren, om så utrustad. Anslut inte värmväxlaren till en vattenkran eller någon kylvätska källa där vattnet trycket är oreglerad.
- Aldrig införa frostskyddsmedel eller organiskt lösningsmedel i någon del av instrumentet. Organiska lösningsmedel kan orsaka irreparabla skador på enheten!
- Fungerar inte med buffert temperaturer över de specificerade maximala tekniska specifikationer. Överhettning kan orsaka irreparabla skador på enheten!

Fan Sensor Kit:

- Varning! Eftersom detta instrument kan utveckla tillräcklig spänning och ström för att producera en dödlig chock, måste man vara försiktig i sin verksamhet.
- Detta instrument är utformat i enlighet med EN61010-1: 2001 elsäkerhet standard. Det bör dock endast användas av utbildad operatörer. Läs hela den här handboken innan du använder instrumentet och endast använda enligt instruktionerna.

Waste Electrical and Electronic Equipment (WEEE)

English



This symbol indicates that the waste of electrical and electronic equipment must not be disposed as unsorted municipal waste and must be collected separately. Please contact an authorized representative of the manufacturer for information concerning the decommissioning of your equipment.

French



Ce symbole indique que les déchets relatifs à l'équipement électrique et électronique ne doivent pas être jetés comme les ordures ménagères non-triées et doivent être collectés séparément. Contactez un représentant agréé du fabricant pour obtenir des informations sur la mise au rebut de votre équipement.

German



Dieses Symbol kennzeichnet elektrische und elektronische Geräte, die nicht mit dem gewöhnlichen, unsortierten Hausmüll entsorgt werden dürfen, sondern separat behandelt werden müssen. Bitte nehmen Sie Kontakt mit einem autorisierten Beauftragten des Herstellers auf, um Informationen hinsichtlich der Entsorgung Ihres Gerätes zu erhalten.

Italian



Questo simbolo indica che i rifiuti derivanti da apparecchiature elettriche ed elettroniche non devono essere smaltiti come rifiuti municipali indifferenziati e devono invece essere raccolti separatamente. Per informazioni relative alle modalità di smantellamento delle apparecchiature fuori uso, contattare un rappresentante autorizzato del fabbricante.

Spanish



Este símbolo indica que el equipo eléctrico y electrónico no debe tirarse con los desechos domésticos y debe tratarse por separado. Contacte con el representante local del fabricante para obtener más información sobre la forma de desechar el equipo.

Swedish



Denna symbol anger att elektriska och elektroniska utrustningar inte får avyttras som osorterat hushållsavfall och måste samlas in separat. Var god kontakta en auktoriserad tillverkarrepresentant för information angående avyttring av utrustningen.



Warning

These units are capable of delivering potentially lethal voltage when connected to a power supply and are to be operated only by qualified technically trained personnel.

Please read the entire operator's manual thoroughly before operating this unit.

These units comply with the statutory EC safety requirements:

- 98/79/EC In Vitro Diagnostic Directive of October 27, 1998
- 73/23/EEC: LOW VOLTAGE DIRECTIVE: IEC 1010-1:1990 plus AMENDMENT 1:1992
- EN 61010-1:1993/BS EN 61010-1:1993 89/336/EC: THE EMC DIRECTIVE FOR ELECTROMAGNETIC COMPATIBILITY

Hoefer single-plate large format gel electrophoresis units are designed to give long service and reproducible results in your laboratory. A few moments spent reading these instructions will ensure that your expectations are reflected in the successful use of the apparatus.

First check that the apparatus has been received complete and undamaged following shipment. Any faults or losses must be reported to Hoefer immediately. Hoefer cannot accept responsibility for goods returned without prior notification.

Refer to the packing list and check that all components and accessories are present.

Please retain all packaging and materials until the warranty period has expired.



1. SQ33 Function and Description

The Hoefer® SQ33 Sequencer offers a wide gel format for increased sample capacity and Shark's Tooth combs to ensure optimal band resolution. The SQ33 Sequencer is perfect for DNA sequencing, DNase and RNase footprinting, and heteroduplex or oligonucleotide analysis. The removable lower buffer chamber combined with the upper buffer chamber drainage tap make buffer disposal easy and safe.

1.1 Unpacking

Unwrap all packages carefully and compare contents with the packing list, making sure all items arrived. If any part is missing, contact your local sales office. Inspect all components for damage that may have occurred while the unit was in transit. If any part appears damaged, contact the carrier immediately. Be sure to keep all packing material for damage claims or to use should it become necessary to return the unit.

1.2 SQ33 Sequencer Components

Description	Quantity
Running Tank + Lid	1
Plain Glass Plates	2
Notched Glass Plates	2
0.35 mm Melinex Spacers	2
0.35 mm Shark's Tooth Comb, 48 well	1



2. SQ33 Specifications

Unit Dimensions (W × D × H)	63 × 21.5 × 50 cm
Plate Dimensions (W × H × D)	33 × 41 × 0.4 cm
Standard Spacer Dimensions (W × H × D)	10 × 410 × 0.35 mm
Active Gel Dimensions (W × H)	29 × 38.5 cm
Maximum Sample Capacity	1 × 96
Recommended Buffer Volume	Upper Buffer Chamber: 1200 ml Lower Buffer Chamber: 1200 ml
Recommended running conditions for 6% denaturing PAGE gel using passive ventilation at 20 °C ambient temperature:	Power: 45–55 W Gel Temperature: 50–60 °C Time: 2.5–3 h
Recommended running conditions for 6% denaturing PAGE gel using FHS-KIT at 20 °C ambient temperature:	Power: 75 W Gel Temperature: 55 °C Time: 1.75 h

2.1 Fan Sensor Kit Specifications

Temperature Control Unit:

Dimensions (H × W × D)	80 × 96 × 140 mm
Temperature Control Range	0–100 °C
Controller Accuracy	+/- 2%
Weight	1.5 kg

Fan:

Dimensions (H × W × D)	38 × 120 × 120 mm
Operating Speed	2,700 rpm
Flow Rate	> 84 CFM
Noise Rating	36 dBA

2.2 Environmental Conditions

- This apparatus is intended for indoor use only.
- This apparatus can be operated safely up to an altitude of 2,000 m.
- The normal operating temperature range is between 4 °C and 65 °C.
- Maximum relative humidity 80% for temperatures up to 31 °C decreasing linearly to 50% relative humidity at 40 °C.
- The apparatus is rated POLLUTION DEGREE 2 in accordance with IEC 664. POLLUTION DEGREE 2, states that: "Normally only non-conductive pollution occurs. Occasionally, however, a temporary conductivity caused by condensation must be expected".

3. SQ33 Operating Instructions

3.1 Regent Preparation and Gel Volumes

For reproducibility and uniform polyacrylamide cross-linking we recommend deionizing, degassing and filtration of acrylamide gel solutions prior to use. Acrylamide solutions should be stored in a cool, dark environment such as a refrigerator and allowed to reach room temperature prior to pouring. Avoid exposure to heat and sunlight.

Polymerization conditions should be adjusted to effect polymerization within about 5 – 10 minutes. Test a small volume in a vial prior to pouring the gel. As a rough guide 100 ml of degassed 6% acrylamide gel will set in about 5 minutes at room temperature when gently mixed with 450 µl of freshly prepared 10% (w/v) Ammonium persulfate plus 200 µl TEMED. The setting time increases to about 10 minutes if the TEMED volume is reduced to 100 µl and to approximately 15 minutes with 75 µl. The amount of catalysts may need to be reduced under warm conditions. Do not pour under direct sunlight.

The SQ33 Sequencer, using 0.35 mm thick spacers, requires approximately 60 mls of acrylamide solution.

3.2 Gel Pouring

1

Remove any greasy fingerprints or water on the edges of the glass plates by wiping with acetone. Lay the plain glass plate on a flat surface and arrange the spacers flush with the edges of the plate. Carefully lay the notched glass plate on top and clamp the plates together. The gel sandwich is now ready for pouring. Refer to the illustration in Figure 1, page 6.

2

Fill a 60 ml syringe with gel mix being careful not to aerate the solution.

3

Hold the syringe as vertical as possible and using a steady continuous motion expel the gel mix along the notched area moving the syringe nozzle repeatedly from one side of the notch to the other. The gel mix should form a continuous pool along the top of the gel space and by capillary action it will move down between the plates. Do not overfill the notched area—the pool should be approximately half the height of the glass ears. Alternatively do not let the pool run dry or air bubbles will be introduced between the glass plates. The boundary of the gel should migrate as a straight line. The gel plates can be tapped slightly behind the moving gel boundary, using your fingers, to prevent any bubble formation. Do not use any hard or metal objects.

4

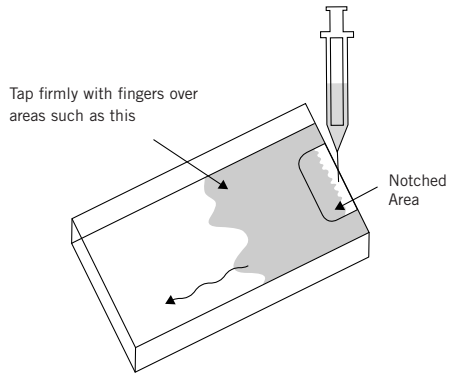
When the gel boundary reaches the bottom of the glass plates, remove the surplus gel from the notched area. Failure to do so will result in the gel mix dripping from the bottom end. Insert the required comb.

5

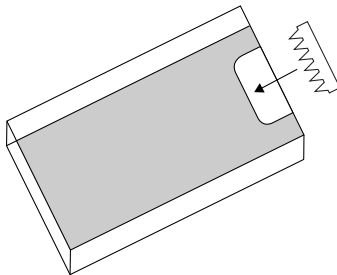
If you are using a comb with square wells insert the teeth without trapping bubbles. If you are using a sharks tooth comb insert the flat face of the comb at a slight angle to prevent bubbles from trapped. Add a few drops of gel mix if necessary. Carefully straighten the comb so that it is parallel to the top of the gel plate and reaches 3–5 mm below the notched area.

Figure 1. Pouring gels horizontally.

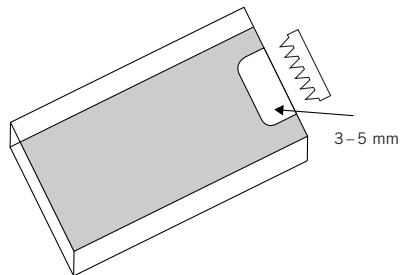
- Hold syringe vertically.
- Move across notched area to maintain a pool of gel mix.
- Do not overfill.
- Do not attempt to force gel mix down between plates with the syringe jet.



- When gel boundary has reached the end remove surplus gel mix from notched area. Leave just a small amount to ensure bubbles don't get trapped under the comb.



- The comb area may be clamped with bulldog clips.
- Do not let the clips protrude beyond the line of the comb otherwise get thickness variation and hence lane distortion may occur.
- When gel has set carefully remove comb and insert it teeth first (being careful not to damage points) so it just contacts the gel surface.
- The gel is then ready to be attached to the main unit and loaded with samples.



6

The gel polymerization should occur within 10 minutes but allow the gel to polymerize further for at least 90 minutes. If it is to polymerize overnight, enclose wet tissues under a cling film seal to prevent the ends of the gel from drying out.

If you are using a square toothed comb do not remove it until it is submerged below the running buffer. However, if you use a Shark's tooth comb it should be removed before the addition of buffer. Insert it teeth first into the gel slot so that the teeth just come into contact with the gel and then add the running buffer.

3.3 Unit Assembly

1

Place the lower buffer chamber into the main unit. Push it back until it stops. This ensures that the electrode separation and hence field strength are consistent from one run to another.

2

Remove any clamps and the bottom tape, if used.

3

Clamp the gel plate sandwich into position on the apparatus. *Do not over tighten the gel plate clamping screws* as this will lead to the glass plates breaking and also making the insertion and removal of combs difficult.

4

The gel plate assembly will rest against the aluminum back plate. This has been set during manufacture to be parallel to the main frame. *Do not tighten or adjust the aluminum plate securing screws.* The aluminum plate is cushion mounted to provide good contact with the glass plate.

5

Make sure that the upper buffer tank drainage tube is closed.

6

Attach the electrical connectors to the buffer chambers.



IMPORTANT! Do not fill over the maximum fill lines.

3.4 Run Conditions and Buffer Volumes

1

Into the upper buffer chamber pour 800 ml (approximately).

2

Into the bottom buffer chamber pour 800 ml (approximately).

3

Ensure that there is no buffer leakage.

4

If desired pre-run the gel until the glass plates are warm. Use the settings described below.

5

Prior to loading your samples flush out the wells with running buffer to clear them of urea.

6

Heat the sequencing samples at 95 °C for 3 minutes, place on ice and centrifuge 12,000×g for 3 minutes. Return to ice.

7

Load 1–5 µl of sample using a suitable loading tip. If possible avoid taking the sample from the bottom of the tube — particulate materials may cause streaking or smearing. Try to minimize sample dispersion, load the sample directly onto the bottom of the well and keep it as a thin layer.

8

Replace the safety lid ensuring it is positioned fully down over the electrical connectors.

9

Connect and run the gel at the desired power setting. The leads and electrical connectors are tested to 1,500 Volts and users are advised not to exceed this voltage.



IMPORTANT! Make sure that the bottom tank does not overflow.

10

Typically 45–55 Watts constant power will give good results with passive ventilation. If the fan kit is used the power can be increased up to 75 Watts. Ensure that with the buffer system employed the voltage does not exceed the maximum recommended voltage. The resistance of the gel changes throughout electrophoresis when run at constant power so the starting and finishing voltages will be different.

11

In general the gel temperature should reach 50–60 °C. At temperatures above this range there is the risk of generating smeared bands or damaging the gel plates.

3.5 Ending the Run

1

Isolate the power supply before removing the connectors.

2

Remove the safety lid by gripping the edges and pushing down with your thumbs on the pegs located on the top of the unit.

3

Disconnect the leads to the upper and lower buffer chambers.

4

Open the upper buffer tank drainage tube. The buffer will then flow into the bottom buffer tank.

5

Remove the lower buffer chamber and carefully discard the buffer to waste.

6

Dismantle the gel and separate the plates with a strong, thin, broad blade.



7

Note: Do not pry the glass plates apart at the ears. Concentrated leverage in any one area may damage the plates.

8

After removing the gel, clean the plates thoroughly in neutral detergent and rinse with distilled water. A sheet of clean foam rubber placed in the bottom of the sink serves as a useful support and minimizes the risk of plate damage.

9

Rinse buffer chambers in deionized water.
Never use organic solvents.

10

Dry the electrical connectors thoroughly with a tissue before storing the unit.

4. Installation and Operation of the Fan Sensor Kit

4.1 Installation

The kit consists of:

- 1 × 12 volt fan (+4 securing screws)
- 1 × Self adhesive temperature sensor
- 4 × Adhesive cable ties
- 1 × Temperature control unit

①

To fit the fan, simply unscrew and retain the four screws securing the black ventilation cover on the safety lid. Align the fan and note that the fan draws air up through the sequencing unit. An arrow on the fan indicates the direction of the air flow. Secure the fan into position using the long securing screws provided. Replace the black ventilation cover on top of the fan so that the fan blades are not exposed.

②

Set up the polymerized sequencing gel in the unit. Using the adhesive strip, attach the flat face of the heat sensor to the center of the facing glass plate. It is advisable to clean the area with a tissue soaked in acetone prior to attachment. *Do not allow acetone to come into contact with the plastic components.*

③

Route the heat sensor cable up and over the back corner of the gel unit, securing the cable so that it will not drag on the sensor. The fan controller is now ready for use.

4.2 Using the Fan Controller

1

Attach the fan connector to the back of the temperature control box.

2

Attach the heat sensor cable into the remaining socket on the rear of the temperature control box.

3

Select the temperature you require to run the gel at, noting that while the control unit is factory calibrated there will be a temperature gradient across both the glass and aluminum plate. Therefore, it is necessary to set a temperature on the dial approximately 10 °C *lower* than required at the gel plate, *e.g.* if you require to run the gel at 55 °C set the dial to approximately 45 °C. Attach the mains lead to the control unit and turn on the power. The light on the control panel indicates when the contacts are made for the fan operation. When the light is on the fan will be off. When the fan cuts in the light will go out.

4

The fan will automatically switch on/off to maintain the gel temperature at ± 4 °C of the set temperature. After monitoring the gel temperature increase the dial setting as necessary. A temperature indicator strip on the center of your glass plate will allow you to confirm that your dial setting is correct.



IMPORTANT! Acrylic plastic is *not* resistant to aromatic or halogenated hydrocarbons, ketones, esters, alcohol's (over 25%) and acids (over 25%), they will cause "crazing" especially of the UV transparent plastic and should *not* be used for cleaning. *Do not* use abrasive creams or scourers. Dry components with clean tissues prior to use.

5. SQ33 Care and Maintenance

- To remove the safety lid, push thumbs down on the plastic lugs and lift the lid vertically with your fingers.
- Before use clean and dry the apparatus with *distilled water only*.
- Before use, and then on a monthly basis, check the unit for any leaks at the bonded joints. Place the unit on a sheet of dry tissue and then fill with *distilled water only* to the maximum fill line. Any leakage will be seen on the tissue paper. If any leakage is seen, *do not attempt to repair or use the apparatus*, but notify Hoefer technical support immediately.
- After each use, wash all components with a suitable water-soluble disinfectant, to reduce the risk of infection.
- Ensure that the connectors are clean and dry before usage or storage.
- The cooling plate upper surface cannot be cleaned with acetone. Methanol and ethanol can be used.

5.1 Cleaning and Storage

- After use, thoroughly rinse all components in deionized water and gently dry the gold electrode connectors with a soft tissue.
- Ensure that the connectors are clean and dry before usage or storage.
- *Never use organic solvents.*

5.2 Fan Sensor Kit Care and Maintenance

- The unit can be cleaned as required when the mains supply is isolated.
- Cleaning should be carried out with a cloth moistened with water or tissues impregnated with 70% iso-propyl alcohol. *No other cleaning solutions should be used.*
- There are no internal operator serviceable parts in this unit. If the power should fail, the unit must be returned to the authorized service center.



IMPORTANT! Request a copy of the Hoefer, Inc. "Health and Safety Declaration" form before returning the item. No items can be accepted for servicing or return unless this form is properly completed.

Note: A Return Materials Authorization (RMA) number must be obtained from Hoefer, Inc, before returning any item to Hoefer, Inc.

6. Customer Service Information

6.1 Technical Service and Repair

Hoefer, Inc. offers complete technical support for all of our products. If you have any questions about how to use this product, or would like to arrange to repair it, please call or fax your local Hoefer, Inc. representative.

Check the Hoefer, Inc. website at www.hoeferinc.com for the distributor in your area. Or contact us directly at:

Hoefer, Inc.

84 October Hill Road
Holliston, MA 01746

Toll Free: 1-800-227-4750

Phone: 1-508-893-8999

Fax: 1-508-893-0176

E-mail: support@hoeferinc.com

Web: www.hoeferinc.com



7. Disposal

This equipment is marked with the crossed out wheeled bin symbol to indicate that it must not be disposed of with unsorted waste.

Instead it is your responsibility to dispose of your equipment correctly at life cycle end by handing it over to an authorized facility for separate collection and recycling.

It is also your responsibility to decontaminate the equipment in case of biological, chemical and/or radiological contamination, so that the persons involved in the disposal and recycling of the equipment are protected from any potential hazard.

For more information about where you can drop off your waste equipment, please contact your local dealer from whom the equipment was purchased originally.

By doing so, you will help to conserve natural and environmental resources and you will ensure that your equipment is recycled in a manner that protects human health.

Thank you.

8. Warranty

Hoefer, Inc. warrants that the unit you have received has been thoroughly tested and meets its published specification.

This unit (excluding all accessories) is warranted against defective material and workmanship for a period of twelve (12) months from the date of shipment ex factory.

Hoefer, Inc. will repair all defective equipment returned during the warranty period without charge, provided the equipment has been used under normal laboratory conditions and in accordance with the operating limitations and maintenance procedures outlined in this instruction manual and when not having been subject to accident, alteration, misuse or abuse.

No liability is accepted for loss or damage arising from the incorrect use of this unit. Hoefer, Inc.'s liability is limited to the repair or replacement of the unit or refund of the purchase price, at Hoefer, Inc.'s option. Hoefer, Inc. is not liable for any consequential damages.

Hoefer, Inc. reserves the right to alter the specification of its products without prior notice. This will enable us to implement developments as soon as they arise.

Hoefer, Inc. products are for research use only.

A return authorization must be obtained from Hoefer, Inc. before returning any product for warranty repair on a freight-prepaid basis.

8.1 Warning

- *Do not* attempt to remove the outer casing or make repairs to our electrical range of products, should any unit fail.
- Contact Hoefer, Inc. immediately if the need for repair or servicing should arise.

8.2 Safety Precautions

- Should the sensor develop a fault or become disconnected the fan will remain “ON” so safeguarding against gel overheating.
- The fan utilizes a brushless motor with reverse polarity protection.
- A 500 mAmp 240 Volt antisurge fuse is located on the rear panel in a fuse holder immediately below the mains supply socket.

9. Ordering Information

Product	Number of wells	Thickness (mm)	Well width (mm)	Well depth (mm)	Well volume µl per 1 mm depth
Shark's Tooth Combs					
SQ33-C35-48K	48	0.35	3	10	5
SQ33-C35-60KMC	60*	0.35	2.5	10	4
SQ33-C35-96K	96	0.35	2.5	9	3.5

Standard Combs

SQ33-C35-48	48	0.35	4	5	7
SQ33-C35-60MC	60*	0.35	2	5	3.5

*Microtiter spacing for use with a multichannel pipette.

Additional Accessories and Replacement Parts	Catalog number
Glass Plates, Rectangular, 33 × 41 cm (2 pieces)	SQ33-GPLT
Glass Plates, Notched, 33 × 41 cm (2 pieces)	SQ33-NGPLT
Spacers, 0.35 mm thick (2 pieces)	SQ33-SP
Fan Sensor Kit, 115 VAC	SQ33-HS-115V
Fan Sensor Kit, 230 VAC	SQ33-HS-230V

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